DEPARTMENT OF THE ARMY
SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS
ROOM 9M15, 60 FORSYTH ST., S.W.
ATLANTA, GEORGIA 30303-8801

REPLY TO
ATTENTION OF

RECORD OF DECISION

CENTRAL AND SOUTHERN FLORIDA FLOOD CONTROL PROJECT UPPER ST. JOHNS RIVER PROJECT - MODIFICATIONS TO PROJECT FEATURES NORTH OF FELLSMERE GRADE BREVARD COUNTY, FLORIDA

DECISION

We have reviewed the Final Supplemental Environmental Impact Statement (SEIS) for modifications to the federally authorized Upper St. Johns River project in the area north of Fellsmere Grade. We have also reviewed all correspondence, including comments on the Draft and Final SEIS. Based on this review and the views of interested agencies and concerned public, we have determined the recommended plan described in the Final SEIS to be economically justified, environmentally acceptable, technically feasible, and in the overall public interest.

PROJECT AUTHORITY AND NEED FOR PROPOSED ACTION

The Upper St. Johns River basin is part of the overall project for Central and Southern Florida which was first authorized by the Flood Control Act of 1948 (Public Law 858, 80 Congress, 2nd Session). That authorization included most of the works in the southern third of the state, but did not include any works in the Upper St. Johns River Basin. All works in the Upper St. Johns River Basin, were authorized by the Flood Control Act of 1954 (Public Law 780, 83rd Congress, 2nd Session) and are presented in House Document 643, 80th Congress, 2nd Session.

The latest design adopted in August 2001 for the TFMCA lowers the outflow weir crest to 20.0 feet NGVD and maximizes flood control benefits for the adjacent impoundment areas. It also presents enhanced environmental benefits in the creation of shallow vegetated lake edges, where the apple snail can be found. This is the preferred food of the endangered snail kite. In the opinion of the US Fish and Wildlife Service (USFWS), the project will be beneficial to the endangered snail kite as it will create habitat for this species in the TFMCA, and the species had not been identified previously in the area. The USFWS also stated the project will not affect the Upper St. Johns Retention Basin snail kite distribution and thus will not have an adverse effect on that species.

RECOMMENDED PLAN AND ALTERNATIVES

Under the recommended 18.5 ft Alternative, structures S-96B and S-96C would be separated so that S -96B would discharge directly into the Three Forks Marsh Conservation Area (TFMCA) and S-96C would continue to discharge into the St. Johns Marsh Conservation Area (SJMCA). This would require additional levee and canal construction not originally specified in the GDM. Discharges from the TFMCA to the SJMCA would occur over a fixed crest weir and through a

culvert structure (S-257). All areas of the TFMCA would be interconnected and the area would function as a single hydrologic unit. The weir crest elevation would be set at 20.0 ft NGVD. Discharge through Structure S-257 would be allowed down to an elevation of 18.5 ft NGVD. Canal plugs would still be constructed in the C-40 Canal to facilitate appropriate flooding of the SJMCA.

The Preferred Alternative involves the above design and the additional acreage of land adjacent to the project area purchased by the Water Management District to be added to the project and enclosed by perimeter levee L-74N. The TFMCA acreage reduction will be added to the C-1 Retention Area. Additional levee construction will be required to separate Structures S-96B and S-96C discharges. A conveyance channel downstream of Structure S-96B connecting to the deep-water habitat will be constructed to provide for appropriate tailwater conditions. A low berm separating this channel from the adjacent marshes will also be needed. The SJMCA and TFMCA will be completely separated except for discharges from the TFMCA into the SJMCA. A detailed description of the recommended plan can be found in Section 5.2 of the SEIS.

This work will eliminate the tailwater conditions that require discharges from Structures S-96B and S-96C to be staggered to meet upstream flood control schedules, thus ensuring that established targets for storm water discharges to the Indian River Lagoon would be met. Wetland habitat values of the SJMCA will be maintained and enhanced. Because of the gradient in ground elevations, the entire TFMCA cannot be restored to shallow marsh. Instead, deep, open water habitat, will be created in the northern half of the TFMCA and marsh habitat will be created toward the southern end. Water control operation schedules will minimize short-term extreme low-water events that may adversely impact the system while still allowing drydowns of the wetlands at appropriate frequencies. The diversity of aquatic and wetland communities in combination with a naturally fluctuating hydrologic regime will create excellent habitat for wading birds, waterfowl, and other wildlife. The extensive deep-water area will provide excellent fisheries habitat as well as provide enhanced water quality benefits.

Four design/operational alternatives were evaluated for managing water levels in the TFMCA. These alternatives are described in detail in the Final SEIS. The alternatives basically provide for variations in the routing of water, connectivity between the SJMCA and the TFMCA, and subdivision of management units within the TFMCA in order to seek the best possible conditions for wetland habitat and endangered species conservation.

Technical and economic criteria used in the formulation of alternative plans were those specified in the Water Resources Council's Principles and Guidelines. The Corps of Engineers considered applicable laws, executive orders, regulations, and local government plans in evaluating the alternatives. The recommended plan contains features that will avoid, minimize and compensate for adverse environmental impacts.

PUBLIC COORDINATION

The Final SEIS was coordinated with pertinent agencies and interested members of the public. A Notice of Availability of the Final SEIS for the proposed project modifications was published in the Federal Register on July 18, 2003. Letters of comment on the Final SEIS did not raise

substantive new issues, except for the Florida State Historic Preservation Officer (SHPO). The SHPO expressed concern that the possibility for additional archaeological sites occurring in the area of potential effect for the project is sufficiently high to necessitate a cultural resource survey of the project area.

A cultural resource survey is being conducted for the project. The results of this survey will be used to make a determination of effect on historic properties. If cultural resources are identified they will be evaluated for their eligibility for listing on the National Register of Historic Places. If eligible historic properties are identified, then appropriate mitigation measures will be developed. All determinations will be made in accordance with procedures identified in 36CFR800 and will be coordinated with the Florida State Historic Preservation Officer.

CONSIDERATIONS BALANCED IN MAKING THE DECISION

The alternatives were evaluated based on predicted flood control and water conveyance impacts and environmental effects. Flood control impacts were evaluated as to whether or not the ability of Structure S-96B to make discharges downstream to the St Johns River was compromised by the tailwater conditions created by flood control discharges through S-96C. Environmental hydrologic criteria, which translate to hydrologic performance measures, were developed to determine the effectiveness of each alternative in meeting environmental goals and objectives. The Upper St. Johns River Basin Hydrologic Model was used to generate simulated long-term water level and flow data for use in this analysis. Environmental criteria were compared to the hydrologic data generated by the model. Primary environmental issues considered were maximizing the number of wetland acres created in the TFMCA and the SJMCA. Other issues considered included the effect of extreme low water events on the aquatic resources (e.g. sport fisheries) that are expected to develop in the deeper flooded portions of the TFMCA and water quality. Structural features, maintenance requirements, and long-term operational costs of each alternative were also considered.

FINDINGS

In view of the above, I find the adverse affects of the proposed action have been minimized, to the extent practicable, and the proposed action is consonant with national policy, statutes, and administrative directives. The total public interest will best be served by providing the improvements as described in the Final Supplementary Environmental Impact Statement.

19 Dec 03
Date

Randal R Castro
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Brigadier General, US Army
Commanding